

<110> Tel Aviv University Future Technology Development L.P.  
 <120> PEPTIDES ANTIBODIES DIRECTED THEREAGAINST AND METHODS USING SAME  
 FOR DIAGNOSING AND TREATING AMYLOID-ASSOCIATED DISEASES  
 <130> FSS-13065-EP  
 <140> 04744917.8  
 <141> June 29, 2004  
 <150> US20030483180P US20030514974P  
 <151> June 30, 2003 October 29, 2003  
 <160> 150  
 <170> PatentIn version 3.2  
 <210> 1  
 <211> 8  
 <212> PRT  
 <213> Artificial sequence  
 <220>  
 <223> Synthetic peptide  
 <400> 1  
 Asn Phe Gly Ala Ile Leu Ser Ser  
 1 5  
 <210> 2  
 <211> 8  
 <212> PRT  
 <213> Artificial sequence  
 <220>  
 <223> Synthetic peptide  
 <400> 2  
 Ala Phe Gly Ala Ile Leu Ser Ser  
 1 5  
 <210> 3  
 <211> 8  
 <212> PRT  
 <213> Artificial sequence  
 <220>  
 <223> Synthetic peptide  
 <400> 3  
 Asn Ala Gly Ala Ile Leu Ser Ser  
 1 5  
 <210> 4  
 <211> 8  
 <212> PRT  
 <213> Artificial sequence  
 <220>  
 <223> Synthetic peptide

<400> 4

Asn Phe Ala Ala Ile Leu Ser Ser  
1 5

<210> 5

<211> 8

<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic peptide

<400> 5

Asn Phe Gly Ala Ala Leu Ser Ser  
1 5

<210> 6

<211> 8

<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic peptide

<400> 6

Asn Phe Gly Ala Ile Ala Ser Ser  
1 5

<210> 7

<211> 5

<212> PRT

<213> Artificial sequence

<220>

<223> Consensus sequence

<220>

<221> misc\_feature

<222> (1)..(1)

<223> Any aromatic amino acid

<220>

<221> misc\_feature

<222> (2)..(2)

<223> Any amino acid, but glycine

<220>

<221> misc\_feature

<222> (3)..(5)

<223> Any amino acid

<400> 7

Xaa Xaa Xaa Xaa Xaa  
1 5

<210> 8

<211> 6

<212> PRT

<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 8

Ala Phe Gly Ala Ile Leu  
1 5

<210> 9  
<211> 6  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 9

Asn Ala Gly Ala Ile Leu  
1 5

<210> 10  
<211> 6  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 10

Asn Phe Gly Ala Ala Leu  
1 5

<210> 11  
<211> 6  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 11

Asn Phe Gly Ala Ile Ala  
1 5

<210> 12  
<211> 6  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 12

Asn Phe Ala Ala Ile Leu  
1 5

<210> 13  
<211> 5  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 13

Phe Ala Ala Ile Leu  
1 5

<210> 14  
<211> 9  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 14

Asn Phe Leu Val His Ser Ser Asn Asn  
1 5

<210> 15  
<211> 7  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 15

Asn Phe Leu Val His Ser Ser  
1 5

<210> 16  
<211> 6  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 16

Phe Leu Val His Ser Ser  
1 5

<210> 17  
<211> 5  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 17

Asn Phe Leu Val His  
1 5

<210> 18  
<211> 5  
<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic peptide

<400> 18

Phe Leu Val His Ser  
1 5

<210> 19

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic peptide

<400> 19

Phe Leu Val His  
1

<210> 20

<211> 8

<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic peptide

<400> 20

Asn Phe Gly Ser Val Gln Val Phe  
1 5

<210> 21

<211> 6

<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic peptide

<400> 21

Asn Phe Gly Ser Val Gln  
1 5

<210> 22

<211> 5

<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic peptide

<400> 22

Asn Phe Gly Ser Val  
1 5

<210> 23

<211> 5

<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 23

Phe Gly Ser Val Gln  
1 5

<210> 24  
<211> 4  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 24

Gly Ser Val Gln  
1

<210> 25  
<211> 4  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 25

Phe Gly Ser Val  
1

<210> 26  
<211> 6  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 26

Asn Ala Gly Ser Val Gln  
1 5

<210> 27  
<211> 5  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 27

Asp Phe Asn Lys Phe  
1 5

<210> 28

<211> 4  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 28

Phe Asn Lys Phe  
1

<210> 29  
<211> 4  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 29

Asp Phe Asn Lys  
1

<210> 30  
<211> 3  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 30

Asp Phe Asn  
1

<210> 31  
<211> 5  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 31

Asp Ala Asn Lys Phe  
1 5

<210> 32  
<211> 6  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 32

Leu Phe Asn Gln Thr Gly  
1 5

<210> 33  
<211> 6  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 33

Ser Phe Phe Ser Phe Leu  
1 5

<210> 34  
<211> 5  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 34

Phe Glu Asn Lys Phe  
1 5

<210> 35  
<211> 5  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 35

Ser Phe Asn Asn Gly  
1 5

<210> 36  
<211> 6  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 36

Leu Gln Asn Phe Thr Leu  
1 5

<210> 37  
<211> 6  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 37

Thr Leu Ile Phe Gly Gly  
1 5



<210> 38  
<211> 6  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 38

Arg Ala Leu Asp Phe Ala  
1 5

<210> 39  
<211> 6  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 39

Gly Leu Val Phe Val Ser  
1 5

<210> 40  
<211> 6  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 40

Gly Thr Phe Gln Ile Asn  
1 5

<210> 41  
<211> 6  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 41

Ser Gly Ile Phe Thr Asn  
1 5

<210> 42  
<211> 5  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 42

Glu Arg Gly Phe Phe  
1 5

<210> 43  
<211> 6  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 43

Arg Asp Phe Leu Asp Arg  
1 5

<210> 44  
<211> 5  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 44

Ser Asn Phe Leu Asn  
1 5

<210> 45  
<211> 7  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 45

Asn Phe Leu Val His Pro Pro  
1 5

<210> 46  
<211> 8  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 46

Asn Phe Gly Ala Ile Leu Ser Ser  
1 5

<210> 47  
<211> 8  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 47

Asn Ile Gly Ala Ile Leu Ser Ser

1

5

<210> 48  
<211> 8  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 48

Asn Leu Gly Ala Ile Leu Ser Ser  
1 5

<210> 49  
<211> 8  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 49

Asn Val Gly Ala Ile Leu Ser Ser  
1 5

<210> 50  
<211> 24  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Single strand DNA oligonucleotide

<400> 50  
aaatgcaaca ccgcgacctg cgcg

24

<210> 51  
<211> 30  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Single strand DNA oligonucleotide

<400> 51  
acccagcgcc tggcgaactt tctggtgcat

30

<210> 52  
<211> 30  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Single strand DNA oligonucleotide

<400> 52  
agcagcaaca actttggcgc gattctgagc

30

<210> 53  
<211> 33

<212> DNA  
 <213> Artificial sequence  
  
 <220>  
 <223> Single strand DNA oligonucleotide  
  
 <400> 53  
 agcaccaacg tgggcagcaa cacctattaa tga 33

<210> 54  
 <211> 18  
 <212> DNA  
 <213> Artificial sequence  
  
 <220>  
 <223> Single strand DNA oligonucleotide  
  
 <400> 54  
 tcggttgca taattact 18

<210> 55  
 <211> 30  
 <212> DNA  
 <213> Artificial sequence  
  
 <220>  
 <223> Single strand DNA oligonucleotide  
  
 <400> 55  
 ccgcgctaag actcgtcgtg cttgcacccg 30

<210> 56  
 <211> 33  
 <212> DNA  
 <213> Artificial sequence  
  
 <220>  
 <223> Single strand DNA oligonucleotide  
  
 <400> 56  
 cgcttgaaag accacgtatc gtcgttggtg aaa 33

<210> 57  
 <211> 36  
 <212> DNA  
 <213> Artificial sequence  
  
 <220>  
 <223> Single strand DNA oligonucleotide  
  
 <400> 57  
 ttacgttggt ggcgctggac gcgctgggtc gcggac 36

<210> 58  
 <211> 114  
 <212> DNA  
 <213> Artificial sequence  
  
 <220>  
 <223> Modified IAPP cDNA for expression in bacteria  
  
 <400> 58  
 atgaaatgca acaccgcgac ctgcgcgacc cagcgcctgg cgaactttct ggtgcatagc 60

agcaacaact ttggcgcgat tctgagcagc accaacgtgg gcagcaacac ctat 114

<210> 59  
<211> 56  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Single strand DNA oligonucleotide

<400> 59  
gggtttccat gggccatcac catcaccatc acgaaaaatg caacaccgcg acctgc 56

<210> 60  
<211> 35  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Single strand DNA oligonucleotide

<400> 60  
gggtttgcgg ccgctcatta ataggtgttg ctgcc 35

<210> 61  
<211> 10  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 61

Lys Cys Asn Thr Ala Thr Cys Ala Thr Gln  
1 5 10

<210> 62  
<211> 10  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 62

Cys Asn Thr Ala Thr Cys Ala Thr Gln Arg  
1 5 10

<210> 63  
<211> 10  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 63

Asn Thr Ala Thr Cys Ala Thr Gln Arg Leu  
1 5 10

<210> 64  
<211> 10  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 64

Thr Ala Thr Cys Ala Thr Gln Arg Leu Ala  
1 5 10

<210> 65  
<211> 10  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 65

Ala Thr Cys Ala Thr Gln Arg Leu Ala Asn  
1 5 10

<210> 66  
<211> 10  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 66

Thr Cys Ala Thr Gln Arg Leu Ala Asn Phe  
1 5 10

<210> 67  
<211> 10  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 67

Cys Ala Thr Gln Arg Leu Ala Asn Phe Leu  
1 5 10

<210> 68  
<211> 10  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 68

Ala Thr Gln Arg Leu Ala Asn Phe Leu Val  
1 5 10

<210> 69  
<211> 10  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 69

Thr Gln Arg Leu Ala Asn Phe Leu Val His  
1 5 10

<210> 70  
<211> 10  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 70

Gln Arg Leu Ala Asn Phe Leu Val His Ser  
1 5 10

<210> 71  
<211> 10  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 71

Arg Leu Ala Asn Phe Leu Val His Ser Ser  
1 5 10

<210> 72  
<211> 10  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 72

Leu Ala Asn Phe Leu Val His Ser Ser Asn  
1 5 10

<210> 73  
<211> 10  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 73

Ala Asn Phe Leu Val His Ser Ser Asn Asn  
1 5 10

<210> 74  
<211> 10  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 74

Asn Phe Leu Val His Ser Ser Asn Asn Phe  
1 5 10

<210> 75  
<211> 10  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 75

Phe Leu Val His Ser Ser Asn Asn Phe Gly  
1 5 10

<210> 76  
<211> 10  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 76

Leu Val His Ser Ser Asn Asn Phe Gly Ala  
1 5 10

<210> 77  
<211> 10  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 77

Val His Ser Ser Asn Asn Phe Gly Ala Ile  
1 5 10

<210> 78  
<211> 10  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 78

His Ser Ser Asn Asn Phe Gly Ala Ile Leu



1 5 10

<210> 79  
<211> 10  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 79

Ser Ser Asn Asn Phe Gly Ala Ile Leu Ser  
1 5 10

<210> 80  
<211> 10  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 80

Ser Asn Asn Phe Gly Ala Ile Leu Ser Ser  
1 5 10

<210> 81  
<211> 10  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 81

Asn Asn Phe Gly Ala Ile Leu Ser Ser Thr  
1 5 10

<210> 82  
<211> 10  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 82

Asn Phe Gly Ala Ile Leu Ser Ser Thr Asn  
1 5 10

<210> 83  
<211> 10  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 83

Phe Gly Ala Ile Leu Ser Ser Thr Asn Val  
1 5 10

<210> 84  
<211> 10  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 84

Gly Ala Ile Leu Ser Ser Thr Asn Val Gly  
1 5 10

<210> 85  
<211> 10  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 85

Ala Ile Leu Ser Ser Thr Asn Val Gly Ser  
1 5 10

<210> 86  
<211> 10  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 86

Ile Leu Ser Ser Thr Asn Val Gly Ser Asn  
1 5 10

<210> 87  
<211> 10  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 87

Leu Ser Ser Thr Asn Val Gly Ser Asn Thr  
1 5 10

<210> 88  
<211> 10  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 88

Ser Ser Thr Asn Val Gly Ser Asn Thr Tyr  
1 5 10

<210> 89  
<211> 8  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 89

Asn Ala Gly Ala Ile Leu Ser Ser  
1 5

<210> 90  
<211> 10  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Peptide array consensus sequence

<220>  
<221> misc\_feature  
<222> (4)..(4)  
<223> Any amino acid, but cysteine

<400> 90

Ser Asn Asn Xaa Gly Ala Ile Leu Ser Ser  
1 5 10

<210> 91  
<211> 8  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 91

Asn Ala Gly Ala Ile Leu Ser Ser  
1 5

<210> 92  
<211> 8  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 92

Asn Ala Gly Ala Ile Leu Ser Ser  
1 5

<210> 93  
<211> 8

<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 93

Asn Asp Gly Ala Ile Leu Ser Ser  
1 5

<210> 94  
<211> 8  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 94

Asn Glu Gly Ala Ile Leu Ser Ser  
1 5

<210> 95  
<211> 8  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 95

Asn Phe Gly Ala Ile Leu Ser Ser  
1 5

<210> 96  
<211> 8  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 96

Asn Gly Gly Ala Ile Leu Ser Ser  
1 5

<210> 97  
<211> 8  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 97

Asn His Gly Ala Ile Leu Ser Ser  
1 5

<210> 98

<211> 8  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 98

Asn Ile Gly Ala Ile Leu Ser Ser  
1 5

<210> 99  
<211> 8  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 99

Asn Lys Gly Ala Ile Leu Ser Ser  
1 5

<210> 100  
<211> 8  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 100

Asn Leu Gly Ala Ile Leu Ser Ser  
1 5

<210> 101  
<211> 8  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 101

Asn Met Gly Ala Ile Leu Ser Ser  
1 5

<210> 102  
<211> 8  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 102

Asn Asn Gly Ala Ile Leu Ser Ser  
1 5

<210> 103  
<211> 8  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 103

Asn Pro Gly Ala Ile Leu Ser Ser  
1 5

<210> 104  
<211> 8  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 104

Asn Gln Gly Ala Ile Leu Ser Ser  
1 5

<210> 105  
<211> 8  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 105

Asn Arg Gly Ala Ile Leu Ser Ser  
1 5

<210> 106  
<211> 8  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 106

Asn Ser Gly Ala Ile Leu Ser Ser  
1 5

<210> 107  
<211> 8  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 107

Asn Thr Gly Ala Ile Leu Ser Ser  
1 5

<210> 108  
<211> 8  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 108

Asn Val Gly Ala Ile Leu Ser Ser  
1 5

<210> 109  
<211> 8  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 109

Asn Trp Gly Ala Ile Leu Ser Ser  
1 5

<210> 110  
<211> 8  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 110

Asn Tyr Gly Ala Ile Leu Ser Ser  
1 5

<210> 111  
<211> 6  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 111

Asn Phe Gly Ala Ile Leu  
1 5

<210> 112  
<211> 3  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<220>  
<221> misc\_feature  
<222> (1)..(3)

<223> Stereoisomer D

<400> 112

Phe Phe Pro  
1

<210> 113

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Synthtic peptide

<220>

<221> misc\_feature

<222> (1)..(1)

<223> D and L methyl alanine

<220>

<221> misc\_feature

<222> (2)..(3)

<223> Stereoisomer D

<220>

<221> misc\_feature

<222> (4)..(4)

<223> D and L methyl alanine

<400> 113

Xaa Phe Asn Xaa  
1

<210> 114

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic peptide

<220>

<221> misc\_feature

<222> (1)..(1)

<223> D and L methyl alanine

<220>

<221> misc\_feature

<222> (4)..(4)

<223> D and L methyl alanine

<400> 114

Xaa Asn Phe Xaa  
1

<210> 115

<211> 2

<212> PRT

<213> Artificial sequence

<220>



<223> Synthetic peptide

<400> 115

Tyr Tyr  
1

<210> 116

<211> 2

<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic peptide

<220>

<221> misc\_feature

<222> (2)..(2)

<223> amidated amino acid

<400> 116

Tyr Tyr  
1

<210> 117

<211> 3

<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic peptide

<220>

<221> misc\_feature

<222> (1)..(1)

<223> D and L methyl alanine

<400> 117

Xaa Phe Phe  
1

<210> 118

<211> 3

<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic peptide

<220>

<221> misc\_feature

<222> (3)..(3)

<223> D and L methyl alanine

<400> 118

Asn Tyr Xaa  
1

<210> 119

<211> 3  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 119

Asn Tyr Pro  
1

<210> 120  
<211> 3  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<220>  
<221> misc\_feature  
<222> (1)..(3)  
<223> Stereoisomer D

<400> 120

Asn Tyr Pro  
1

<210> 121  
<211> 2  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<220>  
<221> misc\_feature  
<222> (1)..(1)  
<223> Stereoisomer D

<220>  
<221> misc\_feature  
<222> (2)..(2)  
<223> D and L methyl alanine

<400> 121

Tyr Xaa  
1

<210> 122  
<211> 2  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<220>  
<221> misc\_feature

<222> (1)..(2)  
<223> Stereoisomer D

<400> 122

Pro Tyr  
1

<210> 123  
<211> 2  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<220>  
<221> misc\_feature  
<222> (1)..(2)  
<223> Stereoisomer D

<400> 123

Tyr Pro  
1

<210> 124  
<211> 6  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 124

Ala Asn Phe Leu Val His  
1 5

<210> 125  
<211> 6  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<220>  
<221> misc\_feature  
<222> (1)..(1)  
<223> D and L methyl alanine

<220>  
<221> misc\_feature  
<222> (4)..(4)  
<223> D and L methyl alanine

<400> 125

Xaa Asn Phe Xaa Val His  
1 5

<210> 126

<211> 5  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 126

Ala Asn Phe Leu Val  
1 5

<210> 127  
<211> 5  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<220>  
<221> misc\_feature  
<222> (1)..(1)  
<223> D and L methyl alanine

<220>  
<221> misc\_feature  
<222> (4)..(4)  
<223> D and L methyl alanine

<400> 127

Xaa Asn Phe Xaa Val  
1 5

<210> 128  
<211> 3  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<220>  
<221> misc\_feature  
<222> (1)..(3)  
<223> Stereoisomer D

<400> 128

Phe Phe Pro  
1

<210> 129  
<211> 4  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<220>  
<221> misc\_feature

<222> (1)..(1)  
<223> Beta-aminoisobutyric acid (Aib)

<220>  
<221> misc\_feature  
<222> (2)..(3)  
<223> Stereoisomer D

<220>  
<221> misc\_feature  
<222> (4)..(4)  
<223> Beta-aminoisobutyric acid (Aib)

<400> 129

Xaa Phe Asn Xaa  
1

<210> 130  
<211> 3  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<220>  
<221> misc\_feature  
<222> (1)..(3)  
<223> Stereoisomer D

<400> 130

Phe Asn Pro  
1

<210> 131  
<211> 4  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<220>  
<221> misc\_feature  
<222> (1)..(1)  
<223> Beta-aminoisobutyric acid (Aib)

<220>  
<221> misc\_feature  
<222> (4)..(4)  
<223> Beta-aminoisobutyric acid (Aib)

<400> 131

Xaa Asn Phe Xaa  
1

<210> 132  
<211> 6  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<220>  
<221> misc\_feature  
<222> (1)..(1)  
<223> Beta-aminoisobutyric acid (Aib)

<220>  
<221> misc\_feature  
<222> (4)..(4)  
<223> Beta-aminoisobutyric acid (Aib)

<400> 132

Gln Lys Leu Val Phe Phe  
1 5

<210> 133  
<211> 2  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 133

Tyr Tyr  
1

<210> 134  
<211> 4  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 134

Asn Tyr Tyr Pro  
1

<210> 135  
<211> 3  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<220>  
<221> misc\_feature  
<222> (3)..(3)  
<223> Beta-aminoisobutyric acid (Aib)

<400> 135

Tyr Tyr Xaa  
1

<210> 136

<211> 3  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<220>  
<221> misc\_feature  
<222> (1)..(1)  
<223> Beta-aminoisobutyric acid (Aib)

<400> 136

Xaa Tyr Tyr  
1

<210> 137  
<211> 4  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<220>  
<221> misc\_feature  
<222> (1)..(1)  
<223> Beta-aminoisobutyric acid (Aib)

<220>  
<221> misc\_feature  
<222> (4)..(4)  
<223> Beta-aminoisobutyric acid (Aib)

<400> 137

Xaa Tyr Tyr Xaa  
1

<210> 138  
<211> 4  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<220>  
<221> misc\_feature  
<222> (1)..(1)  
<223> Stereoisomer D

<220>  
<221> misc\_feature  
<222> (4)..(4)  
<223> Stereoisomer D

<400> 138

Asn Tyr Tyr Pro  
1

<210> 139  
<211> 3  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 139

Pro Tyr Tyr  
1

<210> 140  
<211> 3  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 140

Tyr Tyr Pro  
1

<210> 141  
<211> 4  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<400> 141

Pro Tyr Tyr Pro  
1

<210> 142  
<211> 2  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<220>  
<221> misc\_feature  
<222> (1)..(2)  
<223> Stereoisomer D

<400> 142

Tyr Tyr  
1

<210> 143  
<211> 2  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide



<220>  
<221> misc\_feature  
<222> (2)..(2)  
<223> Beta-aminoisobutyric acid (Aib)

<400> 143

Pro Xaa  
1

<210> 144  
<211> 2  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<220>  
<221> misc\_feature  
<222> (1)..(2)  
<223> Stereoisomer D

<400> 144

Phe Pro  
1

<210> 145  
<211> 2  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<220>  
<221> misc\_feature  
<222> (2)..(2)  
<223> Beta-aminoisobutyric acid (Aib)

<400> 145

Trp Xaa  
1

<210> 146  
<211> 2  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<220>  
<221> misc\_feature  
<222> (1)..(2)  
<223> Stereoisomer D

<400> 146

Trp Pro  
1

<210> 147  
<211> 2  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<220>  
<221> misc\_feature  
<222> (1)..(1)  
<223> Stereoisomer D

<400> 147

Phe Pro  
1

<210> 148  
<211> 2  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<220>  
<221> misc\_feature  
<222> (2)..(2)  
<223> Stereoisomer D

<400> 148

Pro Phe  
1

<210> 149  
<211> 3  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<220>  
<221> misc\_feature  
<222> (1)..(2)  
<223> Stereoisomer D

<220>  
<221> misc\_feature  
<222> (3)..(3)  
<223> Beta-aminoisobutyric acid (Aib)

<400> 149

Cys Trp Xaa  
1

<210> 150  
<211> 3  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Synthetic peptide

<220>  
<221> misc\_feature  
<222> (2)..(2)  
<223> Stereoisomer D

<220>  
<221> misc\_feature  
<222> (3)..(3)  
<223> Beta-aminoisobutyric acid (Aib)

<400> 150

Cys Trp Xaa  
1